April 2018

Trust in water

Initial proposals on water resource RCV allocations – feedback to companies

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About this document

This document sets out feedback to the 17 largest water companies[1] in England and Wales (companies) on their methodology for allocating the wholesale water regulatory capital value (RCV) between the future water network plus and water resource controls in their January 2018 submissions.

To provide a level playing field for water resources trading and to protect customer interests, it is important that a robust methodology supports the allocation of the wholesale water RCV at 31 March 2020 between the network plus and water resources controls at the 2019 periodic review (PR19).

We expect companies to use this feedback to consider their proposed RCV allocations that they will submit in their PR19 business plans by 3 September 2018.

[1] In this document we use the term “companies” to mean companies that hold appointments as water undertakers under the Water Industry Act 1991.

Contents

1. Introduction

1.1 We will set separate revenue controls for water resources and water network plus for the first time at the 2019 Periodic Review (PR19). To do this we need to allocate the wholesale water RCV between these controls.

1.2 In May 2016, we set out our objectives for allocating the RCV as:

- **Ensuring a level playing field within water resources**, so that third-party service providers have clarity and confidence that they are participating in the market on equal terms with incumbents.
- **Ensuring a level playing field in relation to wider markets**, in cases where incumbent water companies use legacy assets to offer services outside the regulatory ring-fence. This could arise, for example, when providing water resources outside the core area of public supply
- **Avoiding over-recovery of any gains from legacy asset sales/purchases by incumbent companies**, although we acknowledged that this was more likely to be relevant for bioresources than for water resources.
- **Maintaining consistency between charges and cost recovery**.

1.3 In January 2017, we provided guidance for water companies (companies) on allocating their wholesale water RCV between the network plus and water resource controls. We stated that we expected companies to use an unfocused method to allocate their wholesale water RCV between water resources and water network plus and we provided examples of approaches that companies could use to allocate their RCV along with considerations to take into account when applying each approach.

1.4 We asked companies to provide us with their initial methodology for their RCV allocation by 31 January 2018. We have reviewed companies' proposals for allocating their wholesale water RCV against our guidance. In this document we summarise our feedback to companies. We expect companies to consider our feedback when pulling together their business plans which they will submit to us by 3 September 2018.

1.5 In table 1.1, we summarise the approaches companies have used to allocate their wholesale water RCV and the resulting allocation to water resources. Most companies (11 out of 17) have used the unfocused net MEAV method to allocate their RCV citing the availability of previously assured data, bill impact and consistency with price setting as key drivers in this decision.

Table 1.1 Company approaches to allocation and % RCV allocation to water resources

Company	% RCV allocation to water resources 2020	Allocation method
Anglian Water	6.2%	Net MEAV
Northumbrian Water	17.2%	
Severn Trent Water	5.5%	
Southern Water	8.0%	
South West Water	9.1%	
Thames Water	4.4%	
Wessex Water	5.7%	
Affinity Water	11.0%	
Portsmouth Water	2.7%	
Sutton and East Surrey Water	5.2%	
South Staffordshire Cambridge	3.7%	
Dŵr Cymru	10.6%	Gross MEAV
Yorkshire Water	20.2%	
United Utilities	12.0%	Economic value
Dee Valley Water	80.2%	Combined net MEAV and economic value
Bristol Water	22.2%	Average of net MEAV and historic expenditure
South East Water	5.0%	Considered net MEAV (plus adjusted for developer contributions) and gross MEAV

Key findings

1.6 The main findings from our review of companies' proposals for allocating their wholesale water RCV in their January submissions are as follows:

- Most companies have set the RCV allocation in line with existing charges and consider that suitable alternative options provide a similar answer;
- Bristol Water and South East Water used a hybrid of different methods, although the proposed allocations are within the range set by the gross and net MEAV methods used by most other companies.
- Dee Valley Water allocation is in line with that it proposed in connection with the planned changes to area that we intend to implement from 1 July 2018.
- United Utilities allocation is significantly below what it would be if it used the net or gross MEAV methods used by most companies. It is also very sensitive to the assumptions it has made; and
- We are satisfied that the vast majority of customers should not have a noticeable bill impact as a result of the proposed RCV allocations.

Feedback to companies

1.7 In table 1.2 below, we set out the concerns that we had with particular companies' submissions and how we expect companies to address these concerns in their business plan submissions.

Table 1.2 Summary of feedback to companies

Company	Concern/issue	Feedback
Wessex Water	A partial revaluation of the net MEAV does not comply with our guidance which states: "If companies do choose to undertake a full revaluation of their assets, they should undertake this for their **entire water wholesale asset base.** This is necessary to inform an unfocused allocation of the RCV."	If a company wishes to propose an allocation based on a revaluation of the net MEAV, we expect it to provide convincing evidence to support a revaluation of its entire wholesale water asset base, including network plus assets, in its business plan.
United Utilities	United Utilities proposed allocation is very sensitive to the assumptions it has made. United Utilities appear to have proposed the allocation to minimise the bill impacts on a small number of large business customers. United Utilities has not convinced us that they have considered other possible options for how it could manage these bill impacts. It expects to provide bulk supplies of water to other water companies but has not been	We expect companies to be transparent about the sensitivity of their assumptions in the methods it uses to allocate the RCV and take this into account when proposing an RCV allocation. We expect the company to provide further assurance that its allocation will protect the interests of customers in the context of the development of markets. Companies should explore all methods for how they can manage the bill impact on customers.

Company	Concern/issue	Feedback
	clear how the low RCV allocation will protect the interests of customers.	
Northumbrian Water and Affinity Water	There is no evidence that the companies have considered any of the other potential approaches to allocation or cross checked these against their chosen allocation methods.	We expect companies to consider other potential allocation approaches that use existing data and contrast the proposed allocation against them in their business plan. They should also include a proper justification for selecting their chosen approach in their business plans.
Northumbrian Water	Northumbrian Water adjusted its net MEAV to recognise additional depreciation prior to 2015 in respect of the current International Financial Reporting Standards (IFRS) treatment. This is inconsistent with our guidance.	We expect companies to use applicable accounting rules in making adjustments to roll forward the reported 2015 net MEAV. We do not expect companies to retrospectively seek to apply changes in accounting standards.
All companies	There has been a significant variation in the level of independent assurance provided by companies in support of their RCV allocations.	We wanted companies' to take ownership of their RCV allocations, so we left it to companies to decide to what extent they should obtain additional assurance over and above Board assurance for their January RCV submissions. We expect companies to provide evidence of independent assurance undertaken to support

Company	Concern/issue	Feedback
		their RCV allocations in the business plans where they have chosen an allocation method which: is not based on data for which independent assurance has been provided to us either as part of this submission or previous regulatory returns; and / or includes significant new assumptions
United Utilities, Dŵr Cymru, Northumbrian Water and Anglian Water	Customers with minimal use of network plus assets could be unduly impacted by the RCV allocation, as any changes in the water resource element of their water bill will not be offset by changes in the network plus element.	We expect companies to consider the potential bill impacts on customers, especially if companies supply water to customers with minimal use of network plus assets, and consider all options for managing these.
All companies	Information companies have provided in their initial submissions has helped us to have confidence that the proposed RCV allocation will not have a significant impact on most customer bills. Only particular groups of customers are at potential risk. The information we requested is not of a granular enough level to help identify the bill impacts for these customers.	We are removing the requirement for companies to provide revenue and volume information on tables WS12b and WWS12a. Instead we expect companies to explain how they have identified if the bills of any customer are at potential risk of significant impact from the allocation of the RCV. As part of this companies should also consider any other change in the balance of costs between water resources and network plus revealed in its business plan. It should also consider the

Company	Concern/issue	Feedback
	In addition in reviewing the information we have identified that there is a large area of judgement for companies for how they allocate depreciation charges. Ultimately the approach companies took in the past will not impact bills post 2020. Rather it is the approach companies take to RCV run off for each control at PR19.	consequent impact of new information on its charging structures. For any customer groups identified as being at potential risk the company should set out how it will manage the bill impacts and what they expect the resulting impact for these customers to be.

2. Background

Why set a separate water resources control?

2.1 PR19 will be the first time we set a total revenue control for water resources which is separate from network plus water. Our control will provide a framework to protect the interests of customers through better targeted regulation and increased management focus. It will also enable greater collaboration between companies and other water resources service providers, to maximise the value of existing resources and incentivise the efficient development of new water resources options.

2.2 A separate binding revenue control for water resources will also help to remove barriers to water trading by revealing improved information that will support company decision-making, mitigate cross-subsidy concerns, and help foster a more commercial culture within companies in relation to relevant activities.

How do we expect companies to allocate their wholesale water regulatory capital value (RCV)?

2.3 We use a building blocks approach to setting our price controls; calculating the efficient costs companies need to run their business and making sure that customers do not pay more than this. An important building block is the cost of the capital invested in the company, the regulatory capital value (RCV). We currently have a single wholesale water RCV which reflects the investment shareholders made at privatisation and the additional net investment required by companies since that date. The RCV tends to have a lower value than provided by other methods of valuing the assets of water companies.

2.4 In **Water 2020: our regulatory approach for water and wastewater services in England and Wales**, May 2016, we asked companies to use an **unfocused approach** to allocate their wholesale water RCV between the network plus and water resources price controls at PR19. An unfocused approach means that the wholesale water RCV will be allocated to water resources based on the proportion of water resources assets employed in the business relative to the total assets of the wholesale water business.

2.5 This is different to a focused approach, under which the RCV for water resources would be based on the value of the water resource assets employed (for example as represented by their net Modern Equivalent Asset Valuation (MEAV)).

2.6 We believe that a focused approach would not be viable or desirable as the scale of the RCV discount (difference between the value of the RCV and value of the assets) at privatisation could result in the entire legacy RCV being allocated to the water resources control for some companies.

Approaches to an unfocused allocation

2.7 We decided not to impose a common allocation methodology for an unfocused allocation of the wholesale water RCV to water resources. Instead, we expect each company to take ownership and responsibility for how it's legacy pre-2020 RCV is allocated between water resources and network plus, consistent with an unfocused approach. We believe that this approach will avoid unintended and unnecessary impacts on wholesale tariffs and strengthen companies' ownership of their wholesale tariff structure.

2.8 We repeat the potential approaches we set out in our guidance that companies could take to allocate their RCV between water resources and network plus in table 2.1 below.

Table 2.1 Potential approaches to allocating the pre-2020 legacy RCV

Approach to RCV allocation	Summary of considerations
Based on net MEAVs	Companies can consider a roll forward of the 2014-15 net MEAV for water resources (based on the full revaluation of all water wholesale assets carried out at PR09). The unfocused allocation of RCV would be based on the proportion of the net MEAV for water resources assets of the net MEAV for all water wholesale assets.
Based on gross MEAVs	This would potentially be a lower allocation than an unfocused approach on a net MEAV basis, as assets existing at privatisation (including long life water resource assets such as reservoirs) would have a higher relative gross MEAV and therefore be less represented in an RCV allocation on this basis than those that have been replaced more recently.

Approach to RCV allocation	Summary of considerations
Splitting pre-privatisation assets at a discount to the RCV and post privatisation assets at full value	Companies may want to consider this as a cross check to other approaches that consider historical expenditure. However, given the changes to asset records and accounting classification since privatisation this may be difficult to calculate
Historical expenditure – e.g. proportion of past expenditure, or operating costs and accounting charges for capital expenditure, incurred on water resources	Depending on the data and the life of the assets, this may provide a good cross check or alternative approach to an allocation based on estimates of net MEAVs. The period of time that was appropriate to consider may in part be driven by the basis for the accounting charges
Projected expenditure (either totex or operating costs and accounting charges for capital expenditure) – e.g. proportion of future expenditure expected on water resources	The proportion of future expenditure expected on water resources could be tested. Given the long life of water resource assets, the period of time that would need to be considered may be longer than 25 plus years of water resource management plans.
Economic value	The forward looking revenue stream (net of operating costs) from prices for water resources and other aspects of water supply set on a consistent long run basis. Where companies have supply demand surpluses at a point in time, the value of this water for trading may need to be considered. The historical and future expenditure considerations associated with the access price for third party water resource providers in the bilateral water trading market in England and compensation payments could be considered with this approach, building on the Average Incremental Cost data in company Water Resource Management Plans
Averaged or hybrid approaches	In arriving at the RCV allocation, companies could consider averaging between different approaches. In doing this companies should consider the impacts on wholesale charge structures

What did we ask companies to do in their January submission?

2.9 We asked companies to submit their water resource RCV allocation information to us by 31 January. We set out what we expected companies to include in their January water RCV allocation submission in appendix 8 of our draft methodology.

2.10 We said that as a minimum, companies should include:

- their proposed unfocused RCV allocation to water resources as a percentage and forecast £m of the 1 April 2020 total water RCV;
- a comparison to the previously reported 2014-15 water resources net MEAV as a proportion of the total water wholesale net MEAV, together with an explanation of why the proposed unfocused RCV allocation varies from this;
- supporting calculations for how the RCV allocation proposal has been calculated as well as details of the alternatives considered, together with a narrative justifying the choice;
- an explanation of how the issues set out in this technical guidance have been considered, in particular any sensitivity testing on wholesale tariffs and bulk supplies;
- clarity on the consistency of the analysis with information within company WRMPs; and
- a statement from their Board setting out the factors and assurance information they considered in support of the proposed RCV allocation.

3. Company approaches to allocation

3.1 In this section we set out the companies' reasons for the proposed RCV allocations in their January submissions.

Net MEAV method

3.2 Most companies (11 out of 17) have allocated their water RCV between water resources and network plus using the net MEAV approach included in our guidance. Our guidance stated that:

- companies can consider a roll forward of the 2014-15 net MEAV for water resources (based on the full revaluation of all water wholesale assets carried out at PR09); and that
- the unfocused allocation of RCV would be based on the proportion of the net MEAV for water resources assets of the net MEAV for all water wholesale assets.

3.3 The main reasons companies have given for using the net MEAV method are:

- this is a tried and tested method that has been used for many years to allocate assets for current cost accounts and to set price limits;
- this approach results in either no or minimal impact on customer bills;
- this approach complies with Ofwat guidance; and
- issues with other potential approaches for allocating the RCV due to their complexity or shortcomings in the data available.

Gross MEAV method

3.4 Two companies (Dŵr Cymru and Yorkshire Water) have allocated their wholesale water RCV between water resources and water network plus using the gross MEAV method.

3.5 The main reasons companies have given for using the gross MEAV method are:

- the method has been used in previous regulatory decisions;
- approach provides more equal treatment for above ground and below ground assets; and
- either no or minimal impact on customer bills.

Economic value method

3.6 United Utilities states it has used an economic value method to allocate its wholesale water RCV between water resources and water network plus. It has calculated the allocation of RCV that would lead to the average price for water equaling the incremental cost of water of an assumed volume of water. This results in a 12% allocation to water resources.

3.7 In our guidance we defined the economic value approach as "the forward looking revenue stream (net of operating costs) from prices for water resources and other aspects of water supply set on a consistent long run basis".

3.8 We said that where companies have supply demand surpluses at a point in time, the value of this water for trading may need to be considered. We stated that the historic and future expenditure considerations associated with the access price for third party water resource providers in the bilateral water trading market in England and compensation payments could be considered with this approach, building on the Average Incremental Cost data in company Water Resource Management Plans.

3.9 United Utilities states that it has used an economic value method as it believes it supports efficient markets by creating access prices which encourage efficient entry and because it limits the bill impact on its non-potable customers.

3.10 It has discounted the use of net and gross MEAV approaches (which would result in a much higher allocation of 30.6% and 28% respectively to water resources). It has stated that given its surplus of water available, resource pricing on this basis would be out of line with relative regional economic values because if the company needs additional water, it is available at lower cost than in water-scarce areas.

3.11 United Utilities has also cross checked its allocation using its economic value method against an allocation under the historical expenditure, projected expenditure and splitting pre- and post-privatisation methods as defined in table 2.1. It has concluded that an allocation under these methods would result in between 6 and 16% of its wholesale water RCV being allocated to water resources. It considers this supports its case for an allocation of 12% to water resources under the economic value method being more appropriate than an allocation of 31% and 28% under the net and gross MEAV methods respectively.

Hybrid allocation methods

3.12 The three remaining companies, Bristol Water, Dee Valley Water and South East Water have used a combination of methods to allocate their wholesale water RCV.

Bristol Water

3.13 Bristol Water have allocated their water RCV between water resources and water network plus using the average of the allocation using the net MEAV and historic expenditure methods.

3.14 In our guidance we defined the historical expenditure method as "a proportion of past expenditure or operating costs and accounting charges for capital expenditure incurred on water resources". We stated that depending on the data and the life of the assets, this may provide a good cross check or alternative approach to an allocation based on estimates of net MEAVs and that the period of time that was appropriate to consider may in part be driven by the basis for the accounting charges.

3.15 Bristol Water believes its hybrid approach is the most appropriate approach because of the inherent uncertainties with a pure net MEAV approach which it believes result in too high an allocation to water resources. It considers that the historic expenditure approach provides a transparent, straightforward RCV calculation and a credible cross check on the net MEAV approach and that taken together the two approaches provide reasonable boundaries for the allocation. This hybrid approach has resulted in an allocation of 22.2% to water resources (based on the average of the 26% allocation using a net MEAV approach and an 18.4% allocation using an historic expenditure approach).

Dee Valley Water

3.16 We recently announced our conditional approval of an application by Dee Valley Water which will allow the company to start providing water and wastewater services to Severn Trent Water's Welsh customers in Powys and Monmouthshire. We also conditionally approved an application by Severn Trent Water to enable the company to become the water supplier for Dee Valley Water customers located in England. The RCV allocation proposals by both companies are on the basis that the changes take effect from 1 July 2018 as planned.

3.17 There are two reservoirs in the Powys region that currently do not serve any customers but provide an income to Severn Trent Water through long term contracts with the Environment Agency and another water company to provide them with extra resilience. These reservoirs are set to transfer to Dee Valley and have a significant impact on its net MEAV and income.

3.18 The company has not used a pure net MEAV method of allocation due to the unique circumstances of the two reservoirs transferring from Severn Trent. As these reservoirs bring in significant third party income each year, it states that the water resources RCV needs to be set at a level which allows for this income and does not impact bill paying customers to their detriment. The company has stated that a 38.6% allocation to water resources using a pure net MEAV approach would not give sufficient RCV for this area of the business, and would result in large bill impacts for water customers. It states that the proposed allocation of 80.2% to water resources is the allocation that result in no bill impact for these customers.

South East Water

3.19 South East Water has allocated 5.0% of its wholesale water RCV to water resources. In arriving at this allocation the company has considered the 4.6% allocation using net MEAV, the 4.7% allocation using net MEAV (after adjusting for developer contributions since privatisation) and the gross MEAV allocation of 5.3%.

4. Our assessment and feedback to companies

4.1 In this section we consider the extent to which companies have complied with our guidance in the following areas in their January submissions:

- Roll forward of historic net MEAV (and definition of water resources)
- Proposed allocation methods (including revaluation of net MEAV)
- Cross checks against other allocation methods
- Impact on wholesale tariffs
- Links to WRMPs and consistency of analysis with information in WRMPs

Roll forward of historical net MEAV (and definition of water resources) – our assessment

4.2 In our guidance, we said that as a starting point companies should reference their existing unfocused allocation of water resources using net MEAV. And that this should be based on a roll forward of 2014-15 net MEAV (which should be based on the full revaluation of assets carried out at PR09).

4.3 We said that the allocation of the wholesale water RCV should comply with Regulatory Accounting Guideline 4.06 (RAG 4.06). We also noted that company annual performance reports for 2016-17 were the first to reflect this definition of water resources with prior years recorded and reported on a different basis.

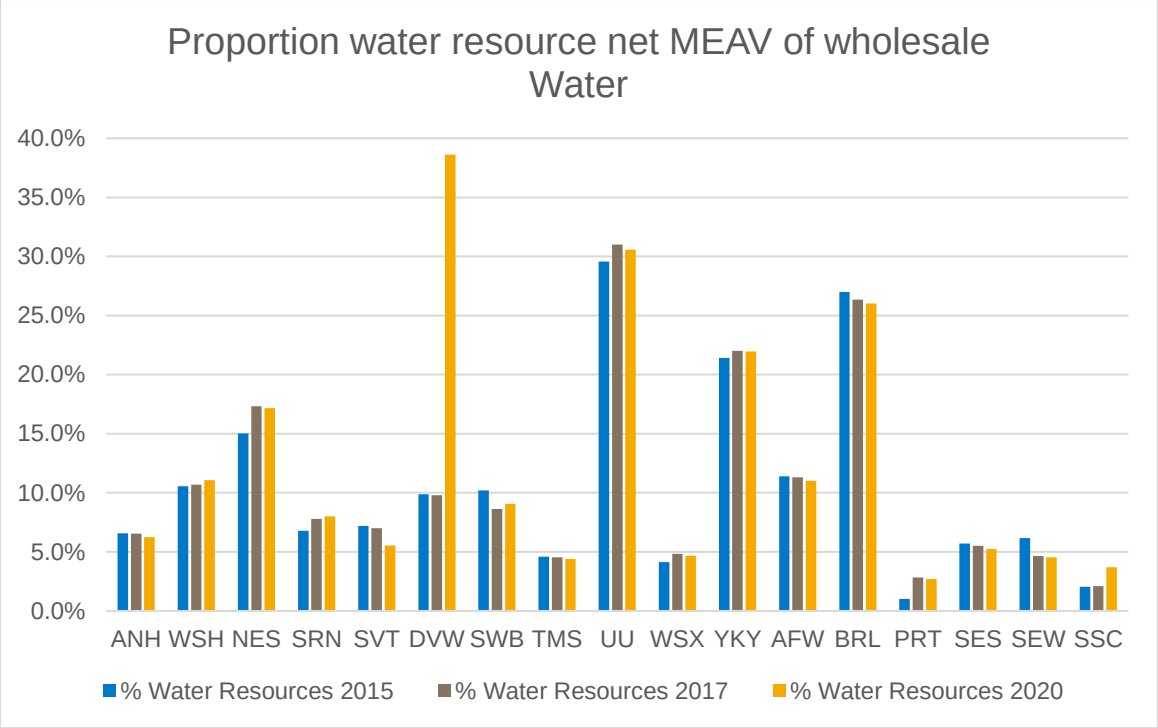
4.4 Because there have been changes to the allocation of assets to the water resources price control unit since 2014-15, we asked companies to set out the following in their submission:

- the basis for any adjustments to historical information to reflect RAG 4.06; and
- explain the impact that this has had on their roll forward of 2014-15 MEAV.

4.5 On the whole, companies that have allocated their 2020 RCV on a 2020 net MEAV basis have rolled forward their 2015 net MEAV in line with our guidance. Many companies have made adjustments to the roll forward MEAV to take into account the RAG 4.06 reclassifications that have been necessary as a result of the boundary changes between water resources and network plus. Where companies have made significant adjustments we have checked that they have provided explanations for these.

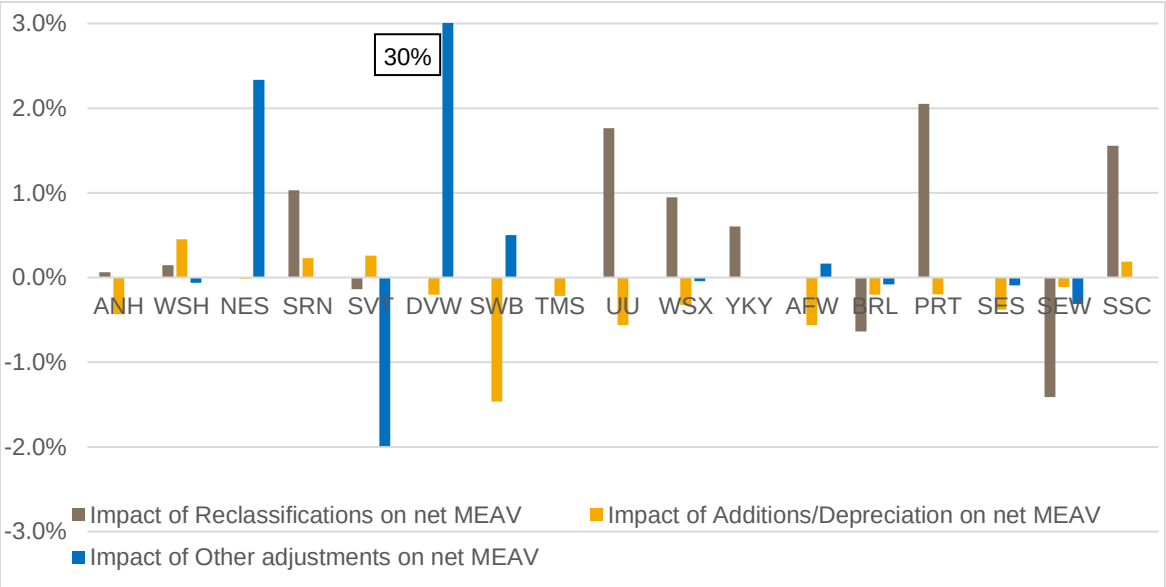
4.6 Figure 4.1 shows how the proportion of water resource MEAV of overall wholesale water RCV has changed from the last time companies published these values in 2015 and how they have forecast to change by 2020.

Figure 4.1 Proportion water resource net MEAV of wholesale water



4.7 Figure 4.2 shows the main reasons for differences in the proportions of water resource MEAV compared to the wholesale water MEAV.

Figure 4.2 Main reasons for changes in the proportion of water resource net MEAV between 2015 and 2020



4.8 The most significant change is for Dee Valley Water due to the transfer of assets, including two reservoirs, from Severn Trent Water, which is further explained in paragraphs 3.16 and 3.17. There is an opposite, but proportionally smaller, impact for Severn Trent Water.

4.9 Northumbrian Water has added a further adjustment to the depreciation charge that has been included in the roll-forward. This is to recognise additional depreciation prior to 2015 in respect of the statutory implementation of the International Financial Reporting Standards (IFRS) treatment. This has been applied to both the water resources and network plus elements of the net MEAV. This is inconsistent with our guidance. We expected companies to roll forward the valuation only applying new accounting standards to the adjustments to do this.

4.10 The water resource proportion of the net MEAV for South West Water has changes due to the merger with Bournemouth Water, which was not reflected in its 2015 net MEAV.

4.11 Companies have had to consider how assets are allocated to business units following changes in our guidelines, the Regulatory Accounting Guidelines (RAGs). This has led to noticeable differences for Southern Water, United Utilities, Wessex Water, Yorkshire Water, Bristol Water, Portsmouth Water, South East Water and South Staffordshire Water.

Roll forward of historical net MEAV (and definition of water resources) – feedback to companies

4.12 We expect companies to use applicable accounting rules in making adjustments to roll forward the reported 2015 net MEAV. We do not expect companies to retrospectively seek to apply accounting standards to the balance as at 31 March 2015, it should only apply to movements after this date.

Proposed allocation methods – our assessment

Net MEAV

4.13 On the whole, we are satisfied that companies have applied the net MEAV method in line with our guidance. Companies have updated their PR09 net MEAV valuation by adding the cost of new assets, removing the value of assets no longer used and adjusting for depreciation, inflation and reclassifications.

4.14 The one exception to this is Wessex Water, which has completed a partial revaluation of its net MEAV for water resource assets, but not network plus assets. This approach has resulted in an allocation to water resources of 5.7% compared to 4.7% when updating the PR09 valuation.

4.15 Wessex Water's partial revaluation method does not comply with our guidance. We said that whilst we do not require companies to undertake a revaluation of their net MEAV for the purposes of the allocation of legacy RCV, "If companies do choose to undertake a full revaluation of their assets, they should undertake this for their **entire water wholesale asset base.** This is necessary for this to inform an unfocused allocation of the RCV."

4.16 We expect Wessex Water to consider our guidance with respect to revaluations when using a net MEAV allocation basis to allocate its wholesale water assets. If the company wishes to propose an allocation based on a revaluation it also needs to provide convincing evidence to support a revaluation of network plus assets in its business plan.

Gross MEAV

4.17 We are satisfied that both Dŵr Cymru and Yorkshire Water have applied this method in line with our guidance by updating their PR09 gross valuation, adding the cost of new assets, removing the cost of assets no longer used and adjusting for inflation and reclassifications.

Economic value method

4.18 It is difficult to establish robust forecasts of costs and revenue required for an economic value approach. United Utilities' economic value approach is very sensitive to the assumptions it has made and it was not transparent over this sensitivity in its submission. This was only apparent following a query.

4.19 All other proposed allocations by companies are within the bounds set by net MEAV and gross MEAV methods. United Utilities is a significant outlier. While we understand that United Utilities is also an outlier in using a split method of allocating RCV discount between pre and post privatisation in its current charging, we consider this is an important aspect in the context of the objective of a level playing field between suppliers of water resources.

4.20 United Utilities expects to provide bulk supplies of water to other water companies but has not been clear how the low RCV allocation will protect the interests of customers in this context. For example, a lower RCV allocation

could increase the assessed profits from trading and reduce benefits to customers.

4.21 While the company has sought to limit the bill impacts on its non potable customers, we are not convinced it has considered all possible options for how the bill impacts may be managed. There may be ways other than setting a low RCV allocation.

Hybrid allocation methods

4.22 Bristol Water have allocated their water RCV between water resources and water network plus using the average of the allocation using the net MEAV and historic expenditure methods. This resulted in a proposed allocation within the range set by the gross and net MEAV methods used by most other companies We are satisfied that this approach is in line with our guidance, and that the company has provided adequate evidence to support its allocation, given that the majority of the data used for both allocation methods can be traced to previous regulatory returns.

4.23 Dee Valley Water has used the economic value method to allocate the water RCV for the two reservoirs transferring from Severn Trent and the net MEAV method to allocate the rest of its water assets. We have reviewed the evidence to support this allocation as part of our work on the Severn Trent / Dee Valley applications to change their appointed areas. We are satisfied that this allocation is in line with our guidance and that the company has provided sufficient evidence to support it.

4.24 South East Water has considered what the allocation to water resources would be using net MEAV, net MEAV adjusted for developer contributions since privatisation and gross MEAV in arriving at its chosen allocation to water resources of 5.0%. We are satisfied with the company's approach to allocating its RCV. The company's proposed allocation is in between what the allocation would have been based on gross MEAV and net MEAV.

Proposed allocation methods – feedback to companies

4.25 We have concerns over two companies' wholesale water allocation proposals - Wessex Water because its net MEAV allocation is based on an allocation of its water resources assets only and not its entire wholesale water asset base, and United Utilities because it has provided insufficient evidence to support its proposal of a 12% allocation to water resources using the economic value basis.

4.26 Wessex Water should consider our guidance with respect to revaluations when using a net MEAV allocation basis to allocate its wholesale water assets in its business plan. If the company wishes to propose an allocation based on a revaluation we expect it to provide convincing evidence to support a revaluation of network plus assets in its business plan.

4.27 We expect companies to be transparent about the sensitivity of their assumptions in the methods used to allocate the RCV and to take this into account when proposing an RCV allocation. We expect United Utilities to provide additional evidence to support its proposed allocation to water resources of 12% or to reconsider its allocation, when it submits its business plan. It should be clear how its proposed RCV allocation protects the interests of customers in the context of developing markets. To the extent that the RCV allocation is driven by limiting the impact on customers' bills the company should demonstrate it has considered all options of managing the impact to its customers, before it proposes a low RCV allocation to water resources.

Cross checks against alternative approaches – our assessment

4.28 In our guidance we asked companies to provide a narrative justifying the approaches considered. We said that companies may want to cross check their RCV allocation using their chosen method against the allocation using the other allocation methods see table 2.1.

4.29 In table 4.1 we collate the allocation to water resources companies have calculated using the different methods, where these have been provided. The proposed allocation for each company using a single allocation method is highlighted in yellow. A number of companies have provided explanations for why allocations based on historic expenditure, future expenditure, economic value and split of pre- and post-privatisation investment are not appropriate. However, few have calculated the allocation using these methods, primarily due to data limitations.

Table 4.1 Company RCV allocation to water resources using different approaches

	Net MEAV	Net MEAV less contributions	Gross MEAV	Split of pre and post-privatisation investment	Historic spend	Future spend	Economic value
ANH	6.2%		7.2%				
WSH	11.1%		10.6%				
NES	17.2%						
SVT	5.5%						
DVW	38.6%						
SWB	9.1%				6.4%	8.8%	
SRN	8.0%		9.4%		6.7 - 13.0%		
TMS	4.4%		5.0%		3.0 – 7.0%	7.0%	
UUW	30.6%		28.0%	6.0%	13.0 - 14.0%	16.0%	12.0%
WSX	5.7%						
YKY	22.0%		20.2%		8.4 - 15.0%		
AFW	11.0%						
BRL	26.0%		22.0%		18.4%		
PRT	2.7%		3.9%		3.5%		
SEW	4.6%	4.7%	5.3%				
SSC	3.7%		4.3%				
SES	5.2%		6.4%				

4.30 It should be noted that whilst Severn Trent, Dee Valley Water and Wessex Water did not calculate the allocation to water resources at 2020 using different methods, they did consider the other potential approaches for allocating their water RCV set out in table 2.1, providing reasons for rejecting the other approaches and selecting their chosen approach.

4.31 Anglian Water and South East Water considered other cross checks than those that we suggested. Anglian Water calculated an alternative net MEAV on the basis that all infrastructure assets are halfway through their life which would allocate 6.4% of the RCV to the water resource price control. South East Water calculated that 10.7% of projected wholesale water expenditure from 2012 to 2025 had been incurred on the water resource business unit.

4.32 The only companies that don't appear to have considered any of the other potential approaches or provided any evidence of cross checks being undertaken are Northumbrian Water and Affinity Water. The only justification Northumbrian Water provides for choosing the net MEAV approach is that it is

in line with Ofwat guidance and tables whilst Affinity Water does not provide any justification for choosing the net MEAV approach.

Cross checks against alternative approaches – feedback to companies

4.33 We expect Northumbrian Water and Affinity Water to provide us with evidence that they have considered other potential allocation approaches and cross checked them against their chosen approach as well as providing a clear justification for selecting their chosen approach in their business plans.

4.34 All companies should provide the results of alternative methods where these are available, even if they doubt the appropriateness of the alternative methods as cross checks.

Impact on wholesale tariffs – our assessment

4.35 In our guidance, we stated that the allocation of the water resources pre-2020 RCV could affect the balance of wholesale tariffs for different services. We said that we expected companies to carry out an analysis of how their proposals could affect the calculation of wholesale charges for different services and customer groups, splitting wholesale charges into water resource and network plus charges. We asked companies to test the sensitivity of the RCV allocation through charging models under a range of different allocation and competition scenarios. We confirmed that we would not expect to see significant disruption in historical tariff structures without strong supporting evidence and a consideration of how to transition to any new tariff structure.

4.36 All companies have, to varying extents, referred to the impact of their proposed RCV allocation on wholesale tariffs. Most companies have used the same method for allocating their RCV as for setting charges, thus minimising the bill impact on different groups of customers.

4.37 There are five exceptions to this – United Utilities, Dee Valley Water, Bristol Water, South East Water and Anglian Water. As can be seen in table 4.2, these companies have proposed a different method for allocating their wholesale water RCV in 2020 to that which they use to set charges. Table 4.2 also sets out what the allocation to water resources would have been had these companies used the same allocation method as for setting charges.

Table 4.2 Comparison of allocation to water resources using proposed allocation method and method used for setting charges

Company	Proposed allocation method for 2020 water RCV	Allocation method used for setting charges	% RCV allocation to water resources proposed for 2020	% RCV allocation to water resources if using method for setting charges
UUW	Economic value	Split pre-privatisation assets at discount to RCV and post privatisation assets at full value	12%	6%
DVW	Net MEAV with economic value for two reservoirs	Net MEAV	80.2%	38.6%
BRL	Average of net MEAV and historic expenditure	Net MEAV	22.2%	26%
SEW	Average of net MEAV (adjusted for requisition charges) and gross MEAV	Net MEAV	5.0%	4.6%
ANH	Net MEAV	Gross MEAV	6.2%	7.2%

4.38 In the case of Dee Valley Water the proposed allocation to water resources of 80.2% is significantly higher than the allocation of 38.6% for setting charges. This is necessary to keep bills constant due to the significant changes in the customer base with the planned reallocation of areas between Severn Trent Water and Dee Valley Water.

4.39 A bill impact as a result of the RCV allocation is only possible where the company's proposed RCV allocation is different to that used for setting charges.

4.40 Even if there is a change in the RCV allocation from that assumed in existing tariff structures, there need not be impact for most customers. Customers pay average charges that include both water resources and water network plus services. A change in the element of the charge for the water resource service is normally offset by an equal and opposite change in the element for the water network plus service.

4.41 For a customer to be at any potential risk it must pay charges with a significantly lower network plus element than the majority of customers. If

customers make less use of network plus assets and the proposed RCV allocation leads to a change in the water resource element of the charge, there may not be an equal and opposite corresponding change to the network plus element of the bill, leading to an overall impact on these customers' bills. The rest of this section considers the potential risk for customers.

4.42 The potential risk is small because the potential impact of changing the water resource RCV allocation is small relative to the overall bill.

4.43 For most companies the water resource element of the average bill that they reported is around **10%**, ranging between 8% and 23% across water companies

4.44 The RCV allocation determines the financial costs recovered through water bills through the return on the RCV and the RCV run off. Financial costs account for around **40%** of water resource costs, although this varies from 10% to 60% across water companies.

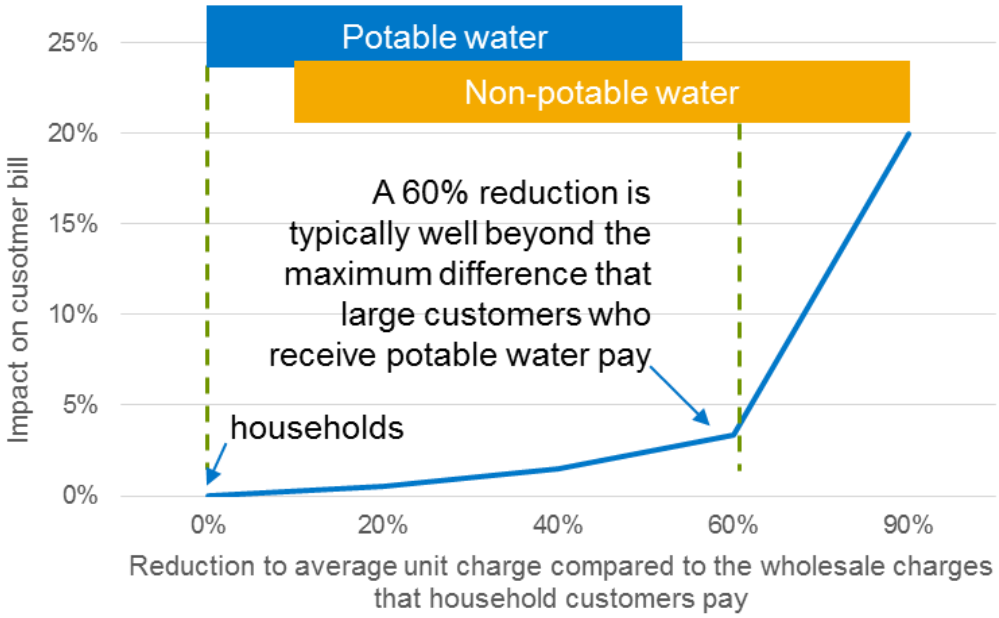
4.45 Therefore for the average company the water resource RCV allocation only affects 4% of the average bills – ie 40% of 10%.

4.46 Even if the RCV allocation to water resources increases by 50%, it would lead to a ~20% increase in the water resource element of the bill. This would only be 2% of the average bill and the network plus element of the bill would decrease by 2% leading to no overall change on average.

4.47 As customers that pay average charges are not at risk, we have examined the likely impact for customers that pay lower charges than on average.

4.48 Figure 4.3 shows the impact for customers with different charging structures. These span from household customers and small businesses (0% reduction) to non-potable customers that pay minimal network plus charges (90% reduction) if they use minimal network plus assets. We have assumed all customers pay the same average charge per unit of water for the water resource element of the bill.

Figure 4.3 Example wholesale water bill impacts for different customers from 20% increase in the water resource element of the bill.



4.49 Even if large industrial customers pay up to 60% less for wholesale charges than household customers the bill impact is still only around 3%. 60% is typically well beyond the maximum difference that large customers who receive potable water pay because they do not make use of all assets such as the local distribution system. This provides confidence that the RCV allocation will not lead to significant bill impacts for most customers.

4.50 The customers at potential risk are those that make minimal use of network plus assets. Only Anglian Water, Northumbrian Water, United Utilities and Dŵr Cymru have standard charges for supplying non-potable water to customers with minimal network plus services.

4.51 Only United Utilities is proposing a significant change to the RCV allocation compared to that assumed in charging structures. United Utilities' charges have an implicit water resource RCV allocation of 6%, but the net MEAV method implies an allocation of 30.6%. This large increase in costs recovered from the water resource element of the bill, if no action was taken by the company, would lead to significant impacts for its non-potable customers. United Utilities considers that using its economic value approach (12% allocation) will deliver a RCV allocation appropriate for markets and limit the impact on its non-potable customers. United Utilities expect that it will be able to put forward a business

plan with overall real terms reductions in charges for all customers, which will help it to manage the bill impact for its non-potable customers.

4.52 The other three companies, Anglian Water, Dŵr Cymru and Northumbrian Water did not comment on these specific customers. We asked the companies to comment and all three confirmed that they expected minimal bill impacts for all customers including their non-potable customers.

4.53 The above figure does not take into account a second order impact. If the water resource element of charges that all customers pay equally are increased, then the network plus element of charges will be reduced by more than the increase, as not all customers pay these equally. It would lead to a slight reduction for households and other small users of water. The exact difference would depend on the distribution of customers that pay lower network plus elements of bills. To understand the impact it would require detailed information to calculate and will be different for each company. However, we expect that it would be less than a 1% difference on any bill.

4.54 It is possible that new information may be revealed through setting the new price controls that may affect the structure of water charges. This could be either a greater understanding of cost allocation between controls or of the use of assets by different classes of customers. Companies should identify potential impacts and also consider these changes when reviewing the impact on specific customers in their business plans and take them into account when setting charges from 2020.

Impact on wholesale tariffs – feedback to companies

4.55 We expect all companies to continue to consider the potential bill impacts on customers, especially if companies supply water to customers with minimal use of network plus assets. As well as the impact from the allocation of the RCV, companies should also consider any other change in the balance of costs between water resources and network plus revealed in its business plan. All companies should also consider the knock on impact of new information on its charging structures.

Projected bill information – our assessment

4.56 We requested that all companies provide standard information on revenues and volumes for their customers. We asked companies to allocate revenue between water resources and network plus. We hoped that this would help us to identify any potential impact on bills. In reviewing the information we have identified

that there is a large area of judgement for companies for how they allocate depreciation charges. There are at least three potential options:

- Use historic cost depreciation that is a proportion of the original cost of assets, but does not take account of inflation;
- Use current cost depreciation that is a proportion of the cost of assets updated by inflation; and
- Allocate the wholesale cost included in the 2014 price limits for RCV run off (similar to depreciation).

4.57 Each approach can lead to a significantly different answer. Ultimately the approach companies took in the past will not impact bills post 2020. Rather it is the approach companies take to RCV run off for each control at PR19. We will assess this at PR19.

4.58 The information we requested could only help us to understand the bill impacts on broad categories of customers. As we are satisfied that bills for the majority of customers will not be impacted by the RCV allocation there is little value in companies providing information for us to review the bill impacts of all customers.

4.59 We also asked for equivalent information for the allocation of the wholesale wastewater RCV between bio-resources and wastewater network plus. The issues we have experienced are also likely to apply for this information. It is also the case that tariff impacts are only likely for particular groups of customers.

Projected bill information – feedback to companies

4.60 We will remove the requirement for companies to provide revenue and volume information on tables WS12b and WWS12b.

4.61 We expect companies to explain how they have identified if the bills of any customer are at potential risk of significant impact from the allocation of the RCV. As part of this companies should also consider any other change in the balance of costs between water resources and network plus revealed in its business plan. Each company should also consider the knock on impact of new information on its charging structures. For any customers identified as being at potential risk the company should set out how it will manage the bill impacts and what they expect the resulting impact for these customers to be.

Links to WRMPs and consistency of analysis with information in WRMPs – our assessment

4.62 Effective water resource planning is essential to ensure the long-term balance between supply and demand is maintained. Every five years statutory WRMPs set out a company's intended approach for at least the next 25 years. The latest set of draft WRMPs, WRMP19, are currently out for public consultation.

4.63 Among other aspects WRMPs set out:

- the potential for water trading;
- the cost of supply (e.g. reservoirs) and demand (e.g. leakage reduction) options to address deficits between water supply and demand; and
- the preferred new options that are required to address any deficits.

4.64 As the costs reported in WRMPs are forward looking they will not be affected by legacy RCV allocation. That said as part of our checks for consistency between WRMPs and RCV allocation we asked companies to:

- provide assurance on the consistency between their draft WRMP19 and their draft submissions;
- consider the consistency of RCV allocation with previous WRMPs as part of their assessment of wholesale tariff structures; and
- report their expected increase in water resources yield in 2020-25.

4.65 The level of evidence that companies provided in this area varied significantly. Some companies' only reference to the links with the WRMP was to state that there were no inconsistencies between their RCV submission and draft WRMP. A number of companies also did not reference if any external assurance was undertaken to review this. In contrast other companies provided a significant amount of evidence, including extracts from their WRMP to support this view.

4.66 Five companies (Affinity Water, Southern Water, South Staffordshire Water, Thames Water and South East Water) had major inconsistencies between their wholesale water RCV submission and their draft WRMP submission. For these companies the calculated increase in water resources yield in the RCV submission does not align with our guidance as it includes the benefit of network plus water options from the draft WRMP. Across the five companies the increased yields are overestimated in the range of 4 to 500 Ml/d;

4.67 Two companies, Portsmouth Water and Severn Trent Water, had minor inconsistencies between their wholesale water RCV submission and their draft

WRMP submission. These companies have not clearly identified the options that are contributing to the increased water resources yield and there are potentially minor variations between the draft WRMP options and the reported yield.

4.68 Ten companies' wholesale water RCV submission and draft WRMP submission appear to be aligned. Three of these companies have calculated an increased water resources yield consistent with both the guidance and the options presented in the draft WRMP. Seven of these companies are in surplus with no planned options that would increase water resources yield.

Links to WRMPs and consistency of analysis with information in WRMPs – our assessment

4.69 In their business plan submissions, we expect companies to:

- consider the level of detail provided to support their allocation and the consistency between it and their WRMP; and
- re-examine their calculation of water resources yield, in particular to ensure its calculation only includes water resources assets. This data is a key part of data table Wr6 - Water resources capacity forecasts. Data is no longer required on table WWS12b in business plans, which we no longer require. We will provide further guidance on the water resources yield calculation in an appendix to RAG 4.08 that we will publish this spring.

The links to bulk supplies – our assessment

4.70 In our guidance, we said that maintaining consistency between charges and cost recovery is a factor companies need to bear in mind when developing their RCV allocation. We stated that where bulk supply prices are related to average costs for components of water resource or network plus services, then the RCV allocation between water resources and network plus could have an impact on the cost associated with providing bulk supplies.

4.71 We made it clear that companies retain ownership of agreeing bulk supply charges and their responsibilities to comply with competition law and that we will only intervene where there are clear risks to consumers or the development of markets.

4.72 In their January submissions, companies have stated that their RCV allocation will have either no impact or a minimal impact on bulk supply costs and

charges. We are satisfied that they have provided us with reasonable justifications to support this assertion.

The links to bulk supplies – feedback to companies

4.73 It is clear from company submissions that companies are aware of our guidance that they retain ownership of agreeing bulk supply charges and their responsibilities to comply with relevant guidance including competition law.

The potential for reallocation at PR24 – our assessment

4.74 In our guidance, we said that for the RCV allocation to provide regulatory commitment and support binding controls, the allocation of the wholesale RCV to the water resources control needs to be stable over time. We stated that this is also important for third party providers who need certainty about the prices they need to compete against.

4.75 We said that we would expect any changes to the RCV allocation at PR24 be the exception rather than the rule, that it would require compelling evidence of a misallocation, and that it will not be an opportunity for companies to improve their competitive position. We emphasized the importance of companies making every effort and providing assurance of appropriate allocations for PR19 to avoid the need for any reallocation at future price controls.

The potential for reallocation at PR24 – our feedback

4.76 Companies have stated in their submissions that they are aware of this guidance and do not intend to reallocate their water RCV at PR24 unless there is compelling reason to do so.

5. Assurance over allocations

5.1 We set out our expectations with respect to what companies needed to include in their January water RCV allocation submission in appendix 8 of our draft methodology.

5.2 We said that as a minimum, companies should include a statement from their Board setting out the factors and assurance information they considered in support of the proposed RCV allocation.

5.3 We said that we will take into account the quality of the assurance statements that companies provide and the confidence we can place in the data provided when providing feedback to companies. And that we seek assurance that the assumptions and any limitations in data used for the analysis have been exposed.

5.4 In line with our requirement, all companies provided a Board assurance statement to support their water RCV allocation. As we wanted companies' to take ownership of their RCV allocations, we left it to companies to decide to what extent they should obtain additional assurance over and above Board assurance.

5.5 Fourteen companies stated that they also had independent assurance undertaken to support their RCV allocations and nine of these companies provided us with the independent assurance report to evidence this.

5.6 When considering the adequacy of companies' assurance over their RCV allocations, we have considered the extent to which companies' allocations are based on data which has already been assured as part of previous regulatory returns. We note that two of the companies' whose allocations were not based on information previously assured did not provide evidence of the independent assurance they referred to in their submission in support of their allocations.

Feedback to companies

5.7 We expect companies to provide evidence of independent assurance to support their RCV allocations in the business plans where a company has chosen an allocation method which;

- is not based on data for which independent assurance has been provided to us either as part of this submission or previous regulatory returns; and / or

- includes significant new assumptions

5.8 In these cases, it is helpful for companies to provide us with evidence of the independent assurance that they have had undertaken. This is because seeing the scope of the work that has been undertaken and the results of this work as signed off by the independent assurer, would give us additional confidence.

6. Next steps

6.1 We expect companies to include transparent, well evidenced and acceptable proposals on pre-2020 RCV allocation.

6.2 We expect companies to consider this feedback and any new evidence that emerges in proposing how to allocate wholesale water RCV between the new water resource and water network plus controls.

6.3 We expect companies to submit updated summary RCV information in the business plan tables in January 2018. As set out in our guidance on business plan data tables this is to include a reconciliation to the information they provided in January 2018.

6.4 As companies consider business plans it is important that they ensure that any new information does not unintentionally lead to a negative bill impact for customers. If there are any problems we expect companies to reconsider the RCV allocation in light of the new information. Companies should not be tied to the initial RCV allocation in their January submissions. It is also important that to note that companies are responsible for complying with both charging rules and competition law.

6.5 In providing information in their business plans we expect companies to follow the assurance requirements set out in chapter 13 of our final methodology.

6.6 As part of the initial assessment of business plans we will assess the appropriateness of companies' proposed pre-2020 RCV allocations between water resources and water network plus. This will take into account of the guidance and feedback we have provided.

6.7 We will confirm the allocation of RCV to the water resources control and water network plus control as part of PR19 determinations.

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales. Our vision is to be a trusted and respected regulator, working at the leading edge, challenging ourselves and others to build trust and confidence in water.

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Printed on 75% minimum de-inked post-consumer waste paper.
April 2018

ISBN 978-1-911588-32-0

This document is also available from our website at www.ofwat.gov.uk.

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